

## SUBSTITUTE ABSTRACT

For the benefit of a reference ISP having a number of users, connectivity evaluations on a data communication network are performed relative to one or more ISPs of interest. Upon selecting a plurality of autonomous systems capable of forming a traffic source and/or destination for the users of the reference provider, tables of the BGP type are provided containing information on the paths available on the network for routing the traffic with regard to the above-mentioned autonomous systems. From these tables the paths of BGP type are extracted for the respective provider or providers of interest, searching for the paths that contain the respective AS number for the provider and/or providers of interest. For each autonomous system the oriented subpaths are extracted between each said autonomous system and the provider or providers of interest, identifying for each subpath the respective number of hops.